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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,495	08/03/2001	Robert C. Stoneman	CTI108	7647

27548 7590 03/27/2003

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EXAMINER

VY, HUNG T

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 03/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/921,495

Applicant(s)

STONEMAN ET AL.

Examiner

Hung T Vy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment file on 1-28-2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Paul IP

PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Claims 1-48 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not clear for guided-wave laser and Er-doped crystalline laser. Is this the guide wave laser or fiber optics or just wave-guide? This is not a laser. In the specification, the applicant does not provide any laser. The disclosure is confusing and misleading because a wave-guide laser is a wave-guide and Er-doped is crystal or medium. It is not a generic term to use "guide-wave laser" and "Er-doped solid-state crystal laser".

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the

United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

Claims 1 –4 and 25-28 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Scheps, U.S. patent No. 6,404,785.

Regarding to claims 1 and 25, Scheps disclose a device for producing laser radiation comprising: a laser diode (102), a guide-wave laser (204) coupled to receive the output emission of the laser diode (fig. 2), an Er-doped solid-state crystal laser (114) being pumped by the wave-guide laser (Fig. 2), the Er-doped solid-state crystal comprises material selected from group YALO (See column 2, line 5), YAG (See column 1, line 18)

Claim Rejections - 35 U.S.C. § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-24, 26-28 and 40– 48 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Scheps, U.S. patent No. 6,404,785 in view of Muller et al., U.S. patent No. 5,963,575.

Regarding claim 16-17 and 40-41, Scheps discloses all limitation of device except for Q-switch the Er-doped solid-state crystal laser. However, Muller et al. disclose the crystal laser (3.2)(See column 3, line column 5 – 8) to enable to production of Q-switched output having high pulse energies (see column 3, line 39 – 50). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify Scheps by having the Q-switch as taught by Muller so as to gain the advantageous benefit of a wavelength longer than 1.4 microns as invention.

Regarding to claims 18 – 21, 26-28 and 42-45, Muller et al. has discussed the output pulse width to between 0.1 microseconds and 1 microseconds (See column 3, line 21 – 22 as 200 ns to 1 microseconds). The solid crystal laser produces laser radiation at a predetermined wavelength of 1.55 to 1.7 microns, 1.643 to 1.648 microns and 1.644 microns to 1.645 microns (see column 3, line 56 – 58)

Regarding to claims 22-24, and 46 – 48, Muller et al. discloses the claimed invention as Er-doped solid-state laser except for dopant concentration of the Er-doped solid-state of laser from 1% to 5%. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have that concentrate, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

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4. Claims 5 –15 and 29 – 39 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Scheps, U.S. patent No. 6,404,785 in view of Muller et al. U.S. patent No. 5,963,575. and Anthon, U.S. Patent. 5,644,589.

Regarding to claims 5-15 and 29 - 39, Scheps discloses the guided-wave laser but he uses different material to make the guided wave laser. ~~However,~~ Because Anthon discloses Yb, Er-doped waveguide laser with wavelength 800nm to 1100nm (See column 1, line 26 – 33). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have different material then depend on material, they will have different wavelength, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Citation of Pertinent References

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to suzuki discloses Double Wavelength Laser, U.S. Patent No. 5,841,801.

Conclusion

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6. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung VY whose telephone number is (703) 605-0757. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (703) 308-3098. The fax numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


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Hung T. Vy
Art Unit 2828

March 10, 2003